

IN THE CLAIMS:

The following listing reflects the current version of all claims, and replaces all earlier versions and listings:

Claim 1. (Currently Amended) A communication apparatus which has IP (Internet Protocol) communication means and transmits/receives communication data to/from a communication partner station discriminated by a telephone number, comprising:

IP address obtaining means for obtaining an IP address of the communication partner station through an SIP (Session Initiation Protocol) from a predetermined server based on the telephone number of the communication partner station; and

control means for transmitting/receiving on an IP network the communication data to/from the communication partner station by using the obtained IP address of the communication partner station, based on a predetermined data transmission/reception protocol,

wherein said control means transmits a transmission request message to the communication partner station after obtaining the IP address and before transmitting the communication data.

Claim 2. (Canceled)

Claim 3. (Original) A communication apparatus according to Claim 1,
further comprising:

facsimile signal communication means for performing communication of a
facsimile signal; and

VoIP (Voice over Internet Protocol) communication means for
transmitting/receiving a frame obtained by digitally encoding the facsimile signal output
from said facsimile signal communication means and adding the IP address.

Claim 4. (Original) A communication apparatus according to Claim 3,
wherein facsimile communication is performed with the communication partner station
through an ADSL (Asymmetric Digital Subscriber Line) gateway for connecting bands
obtained by frequency-dividing ADSL with a splitter respectively to the IP network and a
line switching network, the IP network, and a facsimile gateway for receiving the digitally
converted facsimile signal from the IP network and transmitting the received signal to the
communication partner station through the line switching network.

Claim 5. (Original) A communication apparatus according to Claim 3,
wherein

said IP address obtaining means judges by analyzing the telephone number
of the communication partner whether or not the communication with the communication
partner station through a VoIP transmission path is possible, and

when it is judged that the communication with the communication partner station through the VoIP transmission path is possible, said IP address obtaining means attempts to obtain the IP address of the communication partner station from the predetermined server, and said control means transmits/receives on the IP network the communication data to/from the communication partner station by using the obtained IP address of the communication partner station, based on the predetermined data transmission/reception protocol.

Claim 6. (Original) A communication apparatus according to Claim 1, wherein it is controlled by said control means to obtain the IP address of the communication partner station from the predetermined server based on the telephone number of the communication partner station by using a predetermined UDP (User Datagram Protocol), and further transmit/receive the communication data to/from the communication partner station by using the obtained IP address of the communication partner station on the basis of a predetermined TCP (Transmission Control Protocol).

Claim 7. (Original) A communication apparatus according to Claim 3, further comprising data communication means for performing the data communication by using a data transmission/reception protocol which is not a VoIP procedure signal used by said VoIP communication means and a facsimile procedure signal used by said facsimile signal communication means,

wherein said control means performs image communication by selectively using said VoIP communication means and said data communication means.

Claim 8. (Original) A communication apparatus according to Claim 3, wherein said VoIP communication means is a VoIP codec for converting an analog voice signal into a digital signal.

Claim 9. (Currently Amended) A communication system which includes a communication apparatus having IP (Internet Protocol) communication means and transmitting/receiving communication data to/from a communication partner station discriminated by a telephone number, comprising:

IP address obtaining means for obtaining an IP address of the communication partner station through an SIP (Session Initiation Protocol) from a predetermined server based on the telephone number of the communication partner station; and

control means for transmitting/receiving on an IP network the communication data to/from the communication partner station by using the obtained IP address of the communication partner station, based on a predetermined data transmission/reception protocol,

wherein the communication partner station is a facsimile gateway, and the facsimile gateway transfers image data received from said communication apparatus according to a non-facsimile procedure to a destination communication apparatus

according to a facsimile procedure, and said control means transmits a transmission request message to the communication partner station after obtaining the IP address and before transmitting the communication data.

Claim 10. (Currently Amended) A control method of a communication apparatus having an IP communication means and transmitting/receiving communication data to/from a communication partner station discriminated by a telephone number, said method comprising:

an IP address obtaining step of obtaining an IP address of the communication partner station through an SIP (Session Initiation Protocol) from a predetermined server based on the telephone number of the communication partner station; and

a control step of transmitting/receiving on an IP network the communication data to/from the communication partner station by using the obtained IP address of the communication partner station, based on a predetermined data transmission/reception protocol,

wherein said control step is adapted to transmit a transmission request message to the communication partner station after obtaining the IP address and before transmitting the communication data.

Claim 11. (Canceled)

Claim 12. (Original) A control method according to Claim 10, further comprising:

a facsimile signal communication step of performing communication of a facsimile signal; and

a VoIP communication step of transmitting/receiving a frame obtained by digitally encoding the facsimile signal output in said facsimile signal communication step and adding the IP address.

Claim 13. (Original) A control method according to Claim 12, wherein the communication apparatus performs facsimile communication with the communication partner station through an ADSL gateway for connecting bands obtained by frequency-dividing ADSL with a splitter respectively to the IP network and a line switching network, the IP network, and a facsimile gateway for receiving the digitally converted facsimile signal from the IP network and transmitting the received signal to the communication partner station through the line switching network.

Claim 14. (Original) A control method according to Claim 12, wherein it is judged in said IP address obtaining step by analyzing the telephone number of the communication partner whether or not the communication with the communication partner station through a VoIP transmission path is possible, and

when it is judged that the communication with the communication partner station through the VoIP transmission path is possible, said IP address obtaining step

attempts to obtain the IP address of the communication partner station from the predetermined server, and said control step transmits/receives on the IP network the communication data to/from the communication partner station by using the obtained IP address of the communication partner station, based on the predetermined data transmission/reception protocol.

Claim 15. (Original) A control method according to Claim 10, wherein it is controlled in said control step to obtain the IP address of the communication partner station from the predetermined server based on the telephone number of the communication partner station by using a predetermined UDP, and further transmit/receive the communication data to/from the communication partner station by using the obtained IP address of the communication partner station on the basis of a predetermined TCP.

Claim 16. (Original) A control method according to Claim 12, further comprising a data communication step of performing the data communication by using a data transmission/reception protocol which is not a VoIP procedure signal used in said VoIP communication step and a facsimile procedure signal used in said facsimile signal communication step,

wherein said control step performs image communication by selectively using said VoIP communication step and said data communication step.

Claim 17. (Original) A control method according to Claim 12, wherein said VoIP communication step uses a VoIP codec for converting an analog voice signal into a digital signal.

Claim 18. (Original) A control method according to Claim 10, wherein the communication partner station is a facsimile gateway, and the facsimile gateway transfers image data received from the communication apparatus according to a non-facsimile procedure to a destination communication apparatus according to a facsimile procedure.

Claim 19. (Currently Amended) A control program for a communication apparatus having an IP communication means and transmitting/receiving communication data to/from a communication partner station discriminated by a telephone number, said method comprising:

an IP address obtaining step of obtaining an IP address of the communication partner station through an SIP (Session Initiation Protocol) from a predetermined server based on the telephone number of the communication partner station; and

a control step of transmitting/receiving on an IP network the communication data to/from the communication partner station by using the obtained IP address of the communication partner station, based on a predetermined data transmission/reception protocol,

wherein said control step is adapted to transmit a transmission request message to the communication partner station after obtaining the IP address and before transmitting the communication data.

Claim 20. (Canceled)

Claim 21. (Original) A control program according to Claim 19, further comprising:

a facsimile signal communication step of performing communication of a facsimile signal; and

a VoIP communication step of transmitting/receiving a frame obtained by digitally encoding the facsimile signal output in said facsimile signal communication step and adding the IP address.

Claim 22. (Original) A control program according to Claim 21, wherein the communication apparatus performs facsimile communication with the communication partner station through an ADSL gateway for connecting bands obtained by frequency-dividing ADSL with a splitter respectively to the IP network and a line switching network, the IP network, and a facsimile gateway for receiving the digitally converted facsimile signal from the IP network and transmitting the received signal to the communication partner station through the line switching network.

Claim 23. (Original) A control program according to Claim 21, wherein it is judged in said IP address obtaining step by analyzing the telephone number of the communication partner whether or not the communication with the communication partner station through a VoIP transmission path is possible, and when it is judged that the communication with the communication partner station through the VoIP transmission path is possible, said IP address obtaining step attempts to obtain the IP address of the communication partner station from the predetermined server, and said control step transmits/receives on the IP network the communication data to/from the communication partner station by using the obtained IP address of the communication partner station, based on the predetermined data transmission/reception protocol.

Claim 24. (Original) A control program according to Claim 21, wherein it is controlled in said control step to obtain the IP address of the communication partner station from the predetermined server based on the telephone number of the communication partner station by using a predetermined UDP, and further transmit/receive the communication data to/from the communication partner station by using the obtained IP address of the communication partner station on the basis of a predetermined TCP.

Claim 25. (Original) A control program according to Claim 21, further comprising a data communication step of performing the data communication by using a data transmission/reception protocol which is not a VoIP procedure signal used in said

VoIP communication step and a facsimile procedure signal used in said facsimile signal communication step,

wherein said control step performs image communication by selectively using said VoIP communication step and said data communication step.

Claim 26. (Original) A control program according to Claim 21, wherein said VoIP communication step uses a VoIP codec for converting an analog voice signal into a digital signal.

Claim 27. (Original) A gateway apparatus which includes IP communication means, transmits/receives communication data to/from a first partner station, and transmits/receives communication data to/from a second partner station according to a facsimile procedure, comprising:

obtaining means for obtaining a telephone number of the second partner station or an IP address of the first partner station on the basis of an SIP; and

control means for connecting, by using the obtained telephone number of the second partner station or the obtained IP address of the first partner station, the corresponding partner station, and transmitting/receiving the communication data to/from the corresponding partner station on the basis of a facsimile protocol.

Claim 28. (Original) A control method of a gateway apparatus including an IP communication means, transmitting/receiving communication data to/from a first

partner station by using the IP communication means, and transmitting/receiving communication data to/from a second partner station according to a facsimile procedure by using the IP communication means, said method comprising:

an obtaining step of obtaining a telephone number of the second partner station or an IP address of the first partner station on the basis of an SIP; and

a control step of connecting, by using the telephone number of the second partner station or the IP address of the first partner station obtained in said obtaining step, the corresponding partner station, and transmitting/receiving the communication data to/from the corresponding partner station on the basis of a facsimile protocol.

Claim 29. (Original) A control program of a gateway apparatus including an IP communication means, transmitting/receiving communication data to/from a first partner station by using the IP communication means, and transmitting/receiving communication data to/from a second partner station according to a facsimile procedure by using the IP communication means, said program consisting of:

an obtaining step of obtaining a telephone number of the second partner station or an IP address of the first partner station on the basis of an SIP; and

a control step of connecting, by using the telephone number of the second partner station or the IP address of the first partner station obtained in said obtaining step, the corresponding partner station, and transmitting/receiving the communication data to/from the corresponding partner station on the basis of a facsimile protocol.

Claim 30. (Original) A communication method of, by using an IP communication means, transmitting/receiving communication data to/from a first partner station, and transmitting/receiving communication data to/from a second partner station according to a facsimile procedure, said method comprising:

an obtaining step of obtaining a telephone number of the second partner station or an IP address of the first partner station on the basis of an SIP; and

a control step of connecting, by using the telephone number of the second partner station or the IP address of the first partner station obtained in said obtaining step, the corresponding partner station, and transmitting/receiving the communication data to/from the corresponding partner station on the basis of a facsimile protocol.

Claim 31. (New) A communication apparatus according to Claim 1, wherein said control means transmits a transmission permission message in response to the transmission request message received from the communication partner station, after obtaining the IP address and before receiving the communication data.

Claim 32. (New) A control method according to Claim 10, wherein said control step is adapted to transmit a transmission permission message in response to the transmission request message received from the communication partner station, after obtaining the IP address and before receiving the communication data.

Claim 33. (New) A control program according to the Claim 19, wherein said control step is adapted to transmit a transmission permission message in response to the transmission request message received from the communication partner station, after obtaining the IP address and before receiving the communication data.